

# JOURNAL SUPPLEMENT

Vol. 36, No. 10

OCTOBER 1956

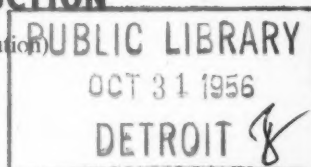
INSTITUTION OF PRODUCTION ENGINEERS, 10, CHESTERFIELD ST., LONDON, W.1

## FIFTH CONFERENCE ON PROBLEMS OF AIRCRAFT PRODUCTION

(promoted by the Southern Section of the Institution)

at the University of Southampton  
(by kind permission of the Vice-Chancellor)

8th and 9th January, 1957



The theme of the Fifth Conference is:

**"New Materials — New Methods"**

Full details of the programme will shortly be announced. In the meantime, members who intend to be present at the Conference are asked to make a note of the dates.

## THE 1956 SIR ALFRED HERBERT PAPER

The Council of the Institution are pleased to inform members that the 1956 Sir Alfred Herbert Paper will be presented by **Dr. B. V. Bowden, M.A.**, Principal of the Manchester College of Technology. His subject will be:

**"The Development of Technological Education in Europe, America and England".**

The meeting will take place in the Great Hall, College of Technology, Manchester, on **Wednesday, 14th November, 1956**, commencing at 6.30 p.m. This meeting will be open to members and non-members of the Institution, but admission will be by ticket only, which may be obtained by completing and returning the form overleaf.

## THE 1956 VISCOUNT NUFFIELD PAPER

Applications are now being received for tickets to attend the 1956 Viscount Nuffield Paper, which is to be presented at the University of Bristol on **Wednesday, 17th October next**. The subject will be:

**"THINKING MACHINES"**

and the speaker is **Dr. W. Grey Walter**, of the Burden Neurological Institute. **Sir Walter Puckey**, Past President of the Institution, will occupy the chair at the meeting.

Admission to the meeting, which commences at 6.30 p.m., will be by ticket only, for which application should be made without delay on the form overleaf, as accommodation in the lecture theatre is limited. The meeting is open to members and non-members of the Institution.

To: THE SECRETARY,  
THE INSTITUTION OF PRODUCTION ENGINEERS,  
10, CHESTERFIELD STREET,  
LONDON, W.1.

**THE 1956 SIR ALFRED HERBERT PAPER**

Please send me, when available, ..... tickets of admission and preprints of the Paper.

Block letters NAME.....

PLEASE ADDRESS.....

To: THE SECRETARY,  
THE INSTITUTION OF PRODUCTION ENGINEERS,  
10 CHESTERFIELD STREET,  
LONDON, W.1.

**THE 1956 VISCOUNT NUFFIELD PAPER**

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## REGIONAL MEETING

### EAST & WEST RIDINGS REGION

7 p.m. October 9th

The Danum Hotel, Doncaster.

"The Production Engineer and Work Study" by J. E. Faraday, B.Sc., Ph.D. and G. H. Case, A.M.I.Mech.E., A.M.C.I.

## SECTION MEETINGS

Visitors Tickets may be obtained from Section Honorary Secretaries.

### OCTOBER, 1956

#### EAST & WEST RIDINGS REGION

**Halifax** 7.15 p.m. October 22nd  
White Swan Hotel, Halifax.  
"Application of Accurate Measurement to Engineering Production" by J. Loxham, M.I.Mech.E., F.R.S.A., M.I.Prod.E.

**Halifax Graduate** 7.30 p.m. October 15th  
White Swan Hotel, Halifax.  
"Brewing—Processes and Methods in the Production of Beer" by J. B. Seabrooke.

**Halifax Graduate** 7 p.m. October 18th  
Works visit to David Brown Tractors, Meltham, Huddersfield.

**Sheffield** 7 p.m. for 7.30 p.m. October 8th  
The Grand Hotel, Sheffield.  
Annual Dinner.

**Sheffield** 6.30 p.m. October 29th  
The Grand Hotel, Sheffield.  
Informal Meeting.

#### EASTERN REGION

**Eastern Counties** 7.30 p.m. October 19th  
Britannia Works Canteen, Davey, Paxman & Co. Ltd., Colchester.

"Jobbing Foundry Work Today" by A. Talbot, M.I.B.F. (Combined meeting with Colchester Engineering Society.)

**Norwich** 7.30 p.m. October 17th  
The Assembly House, Theatre Street, Norwich.  
"What is this Efficiency?" (incorporating 'Work Study' and 'Planning') by A. G. Northcott.

#### MIDLANDS REGION

**Birmingham** 7 p.m. October 17th  
The James Watt Memorial Institute, Great Charles Street, Birmingham.

"Safety as seen by the Production Engineer" and "Safety as seen by the Factory Inspector" by J. Silver, M.I.Prod.E. and A. Hillier.

**Birmingham Graduate** 7 p.m. October 9th  
The James Watt Memorial Institute, Great Charles Street, Birmingham.

"Building a New Factory" by A. G. Sheppard Fidler, M.A., B.Arch., F.R.I.B.A., A.M.T.P.I.

**Birmingham Graduate** 7 p.m. October 17th  
Works visit to Walter Somers Ltd., Haywood Forge, Halesowen, near Birmingham. Meet at works at 7 p.m.

**Coventry** 7 p.m. October 15th  
The Craven Arms, High Street, Coventry.  
"Component Production from Metal Powder" by G. R. Bell, B.Sc., A.R.S.M., A.R.I.C., A.I.M.

**Coventry** 7.30 p.m. for 8 p.m. October 12th  
The Masonic Hall, Coventry.  
Annual Section Dinner-Dance.

**Shrewsbury** 7.30 p.m. October 31st  
The Technical College, Shrewsbury.  
"R.F. Heating and its Applications in the Woodworking Industry" by J. Pound, M.I.R.E., A.I.E.E.

**Wolverhampton** 7.30 p.m. October 17th  
The Wolverhampton and Staffordshire Technical College, Wolverhampton.

"Electronic Control in Industry" by E. Heys, A.M.I.E.E. This is a joint meeting with the Wolverhampton Graduate Section.

**Wolverhampton Graduate** 10 a.m. October 20th  
Works visit to the Deritend Stamping Company Ltd., Liverpool Street, Birmingham, 9.

#### NORTH MIDLANDS REGION

**Derby** 7 p.m. October 15th  
The Derby and District College of Art, Green Lane, Derby.  
"New Techniques in Non-Destructive Testing" (illustrated by slides) by W. G. Cooke, B.Sc.

**Leicester** 7 p.m. October 11th  
The Windsor Room, Bell Hotel, Leicester.  
"Ultrasonic Machining of Hard Materials" by C. F. Brocklesbury, B.Sc., A.R.C.S., A.M.I.E.E.

**Peterborough** 7.30 p.m. October 16th  
The White Lion Hotel, Church Street, Peterborough.  
"Design for Production" by F. E. Butcher.

#### NORTH WESTERN REGION

**Manchester** 7.15 p.m. October 29th  
The Reynolds Hall, College of Technology, Manchester.  
"Computer-Controlled Machine Tools" by D. T. N. Williamson (Ferranti Ltd.).

**Preston** 7.30 p.m. October 19th  
The Demonstration Theatre, North Western Gas Board, Fishergate, Preston.

"What Automation Means" by F. G. Woollard, M.B.E., Hon.A.C.T.(Birm.), M.I.Mech.E., M.I.Prod.E., M.I.L.A., M.S.A.E. This is a joint meeting with the Preston Productivity Committee.

**Stoke-on-Trent** 7.30 p.m. October 22nd  
The Grand Hotel, Hanley, Stoke-on-Trent.

"Air Photography in Peace and War" by Group Captain F. C. V. Laws, C.B., C.B.E., F.R.P.S.

#### NORTHERN REGION

**North Eastern** 7 p.m. October 15th  
The Neville Hall, Newcastle-upon-Tyne.

"Materials Handling for Batch Production" by A. Harvey, A.M.I.Prod.E.

**North Eastern Graduate** 7 p.m. October 5th  
The Roadway House, Oxford Street, Newcastle.  
Film Evening: "Belgian Grand Prix 1955" and "They've Come a Long Way".

**Tees-Side** 7 p.m. October 15th  
The Cleveland Scientific and Technical Institution, Corporation Road, Middlesbrough.

"Glass Fibre and Its Use in Reinforced Plastics" by A. R. Henning, B.A.



### NORTHERN IRELAND REGION

**Northern Ireland** 7.30 p.m. **October 18th**  
The Kensington Hotel, College Square East, Belfast.  
"Production Control"—Hollerith Application).

### SOUTHERN REGION

**Oxford** 7.30 p.m. **October 23rd**  
The North Oxon Technical College, Bath Road, Banbury.  
"Aluminium as a Packaging Material" by J. A. Ambler, B.Sc.

**Reading** 7 p.m. **October 4th**  
The Great Western Hotel, Reading.  
"The Production Engineer of the Future" by S. A. J. Parsons, B.Sc., M.I.Prod.E.

**Southern** 7.15 p.m. **October 18th**  
The Polygon Hotel, Southampton.  
"Plastics—Materials, Processes, Machines" by D. C. Nicholas. In conjunction with Southampton Branch, Institute of Plastics and Southampton Royal Aeronautical Society.

### SOUTH EASTERN REGION

**London** 7 p.m. **October 18th**  
The Royal Empire Society (Craven Street entrance), Northumberland Avenue, Strand, London, W.C.2.

"The Impact of the Production Engineer upon the Work and Payment Structure of Industry" by Dr. E. Jacques.

**London** 7 p.m. **October 30th**  
The Old Ship Hotel, Brighton, Sussex.  
"Material Utilisation" by H. L. Madeley, A.M.I.Prod.E. Followed by a general meeting.

**London Graduate** 7.15 p.m. **October 24th**  
The Institution of Production Engineers, 10 Chesterfield Street, London, W.1.  
"Plastic Moulding—The Materials, Moulds and Moulding Processes" by J. Butler, A.M.I.Mech.E., F.P.I., of B.I.P. Chemicals Ltd.

**Luton** 7.30 p.m. **October 30th**  
The Town Hall, Luton.  
"The Financial Aspects of Automation" by J. Mostyn. Joint meeting with Eastern Branch of Institution of Mechanical Engineers.

### SCOTTISH REGION

**Dundee** 7.30 p.m. **October 10th**  
The New Imperial Hotel, 15 Tally Street, Dundee.  
"Machine Tools from Wilkinson to Automation" by R. Gabriel, M.A.(Cantab.), A.M.I.Mech.E., A.M.I.Prod.E.

**Edinburgh** 7.30 p.m. **October 10th**  
The North British Hotel, Princes Street, Edinburgh.  
"Welding and Marine Engineering" by J. A. Dorrett, A.H.W.C., M.I.E.E., M.I.Welding. (Joint meeting with the Institute of Welding—East of Scotland Branch.)

**Glasgow** 7.15 p.m. **October 15th**  
St. Enoch Hotel, Glasgow.  
"The Sales Manager and Production Management" by Peter Randolph. This is a joint meeting with the British Institute of Management, Institution of Works Managers and The Incorporated Sales Managers Association.

**Glasgow** 7.30 p.m. **October 18th**  
The Institution of Engineers and Shipbuilders, 39 Elmbank Crescent, Glasgow, C.2.  
"British Standards in Production Engineering" by Dr. E. L. Diamond, M.Sc., M.I.Mech.E.

### SOUTH WESTERN REGION

**Cornwall** 7.15 p.m. **October 16th**  
The Camborne School of Mines, Camborne.  
"Organo-Tin Compounds and Their Application in Industry" by Dr. H. S. Hedges (Director, International Tin Research Institute, Greenford). Joint meeting with the Institution of Mechanical Engineers and the Cornish Institute of Engineers.

**Gloucester** 7.30 p.m. **October 8th**  
The Demonstration Theatre, South Western Gas Board, Eastgate Street, Gloucester.  
"Fundamentals of Gauge Design" by K. J. Hume, M.I.Mech.E., M.I.Prod.E.

**Western Graduate** 7.30 p.m. **October 31st**  
The Grand Hotel, Broad Street, Bristol.  
"Methods Improvement—A Management Tool for Increased Productivity" by R. U. Shaw, Grad.I.Prod.E.

### WELSH REGION

**South Wales** 7 p.m. **October 26th**  
The Institute of Engineers, Park Place, Cardiff.  
"Punched Cards System as an Aid to Production" by A. E. Parish (Powers-Samas Accounting Machines Ltd.). This is to be a joint meeting with the South Wales and Monmouthshire Branch of the Institute of Cost and Works Accountants.

**West Wales** 7.30 p.m. **October 19th**  
The Central Library, Alexandra Road, Swansea.  
"Management's Approach to the Introduction of New Methods in Industry" by A. J. Speakman (Deputy Director of the British Productivity Council).

## 1st - 8th NOVEMBER, 1956

### MIDLANDS REGION

**Birmingham Graduate** 7 p.m. **November 8th**  
The Corn Exchange, Kidderminster, (adjacent to Town Hall). Address by B. G. L. Jackman, M.I.Prod.E., (Midland Region Chairman), followed by a film "Volkswagen Story" to conclude by 9 p.m.

**Coventry Graduate** 7.15 p.m. **November 1st**  
The Craven Arms, High Street, Coventry.  
"Factory Layout and Planning with reference to the Production of Jaguar Cars" by J. Silver, M.I.Prod.E., A.I.L.A.

**Wolverhampton** 7.15 p.m. **November 7th**  
The County Technical College, Stafford.  
"Management and Organisation" by E. L. G. Robbins, B.Sc.(Eng.), M.I.Mech.E., A.C.G.I.

### NORTH MIDLANDS REGION

**Nottingham** 7 p.m. **November 7th**  
The Victoria Station Hotel, Milton Street, Nottingham.  
"Spring Design and Manufacture" by J. A. Roberts. This lecture will be illustrated by slides.

**Peterborough** 7.30 p.m. **November 1st**  
The White Lion Hotel, Church Street, Peterborough.  
"The Development of the B.R.M. Racing Car" by A. F. Rivers-Fletcher. (Joint meeting with Peterborough Section of the Incorporated Plant Engineers.)

### NORTH WESTERN REGION

**Preston** 7.15 p.m. **November 7th**  
The Harris Institute, Corporation Street, Preston.  
"Special Purpose Unit Head Machines" by T. W. Elkington, M.I.Prod.E.

### NORTHERN REGION

**North Eastern Graduate** 7 p.m. **November 2nd**  
The Roadway House, Oxford Street, Newcastle.  
"Colour as An Aid to Production" by Miss P. Raine, N.D.D.

### SOUTHERN REGION

**Reading** 7.30 p.m. **November 1st**  
The Canteen, Transport Equipment (Thornycroft) Ltd., Basingstoke.  
"Heat Treatment and Furnace Brazing" by J. B. Carroll, M.Sc., A.I.M..

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## SOUTH EASTERN REGION

**London Graduate** 10.30 a.m. November 3rd  
Works visit to Arthur Guinness & Co. (Park Royal) Ltd.,  
Park Royal Brewery, London, N.W.10. Meeting at  
Coronation Road entrance at 10.30 a.m.

## SCOTTISH REGION

**Glasgow** 7.30 p.m. November 1st  
The Institution of Engineers and Shipbuilders, 39 Elmbank  
Crescent, Glasgow, C.2.  
Open Discussion Night.

# PRODUCTION APPOINTMENTS

BULLETIN No. 37

OCTOBER 1956

The last date for receiving material for insertion in the following month's bulletin is the 20th of each month.

The fee for insertion of particulars regarding each appointment is £3 3s. (up to 100 words), and over 100 words £5 5s. A standard charge of £1 1s. per insertion is made to firms affiliated to the Institution, Technical Colleges, Universities and similar organisations.

Advertisers are advised that better response is likely if, in addition to essential qualifications, the following information is given:—

(a) Location of appointment; (b) Status in the organisation and scope of promotion; (c) Salary range and age range. Advertisers are asked to advise the Institution when appointments are filled. The Institution reserves the right to refuse or withdraw any announcement and also to make any alteration in the wording to ensure conformity with the Institution standards. Members interested in the following appointments should make application in accordance with the terms of notice. No correspondence can be undertaken by the Secretary other than the forwarding of replies to Box Nos.

All advertisements appearing in this Bulletin are subject to the Notification of Vacancies Order of 1952.

**Engineers.** Applications are invited from engineers for work on research and development of automation techniques and production processes for the engineering industry. Previous experience not essential. Candidates should have an engineering or science degree, Higher National Certificate or equivalent qualification. Send full details, including age, qualifications, experience and present salary in confidence to: Box No. 1413, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Graduates.** Production Engineering Research Association requires Graduates (or equivalent) in engineering, physics and metallurgy for fundamental and practical research on machining and forming of metals, friction and lubrication of machine slideways, vibration of machine tools, etc. Previous experience not essential; good prospects of advancement. Status and commencing salary will depend on age, qualifications and experience. Superannuation under F.S.S.U. Applications welcomed from graduates completing National Service this year. Send full details to: R.316, P.E.R.A., Melton Mowbray, Leics.

**Production Engineer** required by factory in Essex with 150 employees producing metal boxes and caps, for work on tool development, with a view to taking charge of production. The applicant should be 35 years or more, and have a good technical background, with experience and knowledge of current practice in this industry. The appointment carries superannuation, life assurance, profits bonus and a good commencing salary with future prospects. Applications, giving full details of training, experience and salary required, should be addressed to: Box No. 1423, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Office Manager.** Smart & Brown (Machine Tools) Limited, require an Office Manager. Must be capable of dealing with home and export sales, quotations, correspondence, order department, advertising, etc. Directly responsible to Director. Apply: 25 Manchester Square, London, W.1.

**Senior Staff Appointment.** A large Midland company, member of a prominent British industrial group, wish to make a senior staff appointment. The company is engaged in one of the basic manufacturing industries and is at present involved in a major development and expansion scheme. The selected candidate will be in charge of a recently formed department concerned with the introduction of improved methods, procedures, incentive schemes, etc. Applicants should have a university degree (or equivalent qualifications), good industrial or production engineering experience and the capacity to deal with people at all levels. The position will carry superannuation, life assurance, an attractive salary and offers good opportunities

for promotion. Applications, which will be treated in strict confidence, should state age, qualifications and experience, Box No. 1433, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Engineer.** Assistant welding, brazing and fabrication engineer required by aircraft electrical engineers. The vacancy occurs due to expansion in the laboratory section which is responsible for development and production control of welding, brazing and other methods of joining high quality aircraft materials. Applicants with an interest in this field, with perhaps some metallurgical or electrical engineering experience, could be given training and an unusual opportunity to work on a wide variety of processes in a team integrated in the design, development and metallurgical departments. The position would be progressive with good facilities for gaining all-round experience in well-equipped shops and laboratories. Write in full to: The Technical Director, (Group M), Rotax Limited, Chase Road, Willesden, N.W.10.

**Production and Development Engineers.** The expansion of the Kilmarnock factory of the Glacier Metal Co. Ltd., Europe's largest manufacturers of plain bearings, continues and there is an urgent need for additional production and development engineers. Our engineering problems (associated with product development and production techniques) are complex, but the work is extremely interesting and varied and provides excellent scope for engineers who have imagination, inventiveness or a flair for design. The only qualification we insist on is an ability to do the work required—technical qualifications are of secondary importance—but the possession of a degree or H.N.C. in Mechanical Engineering would be a useful indication of capacity. We are an old-established Company and are the acknowledged specialists in the field of plain bearings. We have a national reputation for our progressive ideas, particularly on matters connected with organisation and human relations, but we are still earth-bound. We will pay up to £1,000 per annum for good engineers—even higher where there is exceptional merit. Our internal promotion policy provides opportunities for further advancement and the other conditions of service are equally attractive. If you feel you have ability not yet recognised or are considering a change of employment, let us have an opportunity of assessing your suitability for one of these positions. Write to: The Personnel Manager, Glacier Metal Co. Ltd., Kirkstyle, Kilmarnock, Ayrshire.

**Work Study Engineer** required by company in Trafford Park area, to create and establish works study and incentive methods section in their engineering department. This

position offers scope for a person willing to accept responsibility. Salary according to qualifications. Give full details of previous experience and age. All replies treated in the strictest confidence. Box No. 1434, IProd.E., 10 Chesterfield Street, London, W.1.

**Senior Jig and Tool Draughtsmen, Machine Designers and Checkers** required for interesting and varied work. Salaries in excess of A.E.S.D. minimum rates and up to £900 per annum according to ability. Three weeks holiday, non-contributory insurance scheme, free overalls, five-day week, with overtime optional. Cyril Adams & Co. Ltd., 155 East Barnet Road, New Barnet. Tel: Barnet 2355.

**Assistant Chief Production Engineer.** A large aircraft organisation invites applications for the position of Assistant Chief Production Engineer at their main factory. It is essential that applicants have been aircraft trained and have held a similar position for a number of years in an aircraft establishment. The successful applicant will be responsible to the Chief Production Engineer for the ratifying, methods, planning, jig and tool design, production control and progress departments. Pension scheme. Write, stating age, experience and salary required to: Box II.635, c/o 191 Gresham House, E.C.2.

**Production Engineer or Mechanical Engineer** with good general experience of engineering manufacture required for responsible position in Midlands organisation. Essential personal qualities include enthusiasm, capacity for original thought and the ability to prepare lucid reports, etc. Send details of training, experience, salary required, etc. to: Box No. 1435, IProd.E., 10 Chesterfield Street, London, W.1.

**Manager.** A vacancy occurs at the Kilmarnock factory of The Glacier Metal Co. Ltd., for a Manager to take charge of a light engineering machine shop. The Company manufactures a wide range of plain bearings for the automobile and engineering industries and are the acknowledged specialists in this field. The Manager, who is immediately subordinate to the General Manager, carries responsibility for the whole of the manufacturing activities of the department which employs approximately 200 people. He has under his command not only production personnel, but also a number of technical and engineering staff. Because quality standards demanded are high and the engineering problems encountered considerable, the job is an exacting one, but it is full of interest and offers considerable scope to a man with experience and ability. The most suitable applicant will be between 30 and 45 years of age. He will have a sound background of engineering training and experience and a thorough knowledge of general workshop practice. The standard of training and education would be commensurate with the possession of a good engineering degree or a similar qualification. He will have managerial skills, resourcefulness and an ability to make sound judgments. This is a senior staff appointment which carries a salary range of the order of £1,500-£2,000 per annum. Staff bonus and pension schemes are in operation. Applications should be sent to: The General Manager, Glacier Metal Co. Ltd., Kirkstyle, Kilmarnock, Ayrshire.

**Engineer,** 30-45, required for post demanding considerable personality and organising ability, combined with sound knowledge of basic metal cutting and manipulating operations, also with experience in production planning, work study, etc. The duties will include talks, lectures and demonstrations to all levels of production personnel both at Melton Mowbray and factories throughout the United Kingdom. Write, giving details of age, experience, qualifications and salary required to: The Secretary, (D.331), P.E.R.A., Melton Mowbray, Leics.

**Plant Engineer** of administrative status required by Central Scotland Ironfounders and manufacturers of cooking and heating appliances. Salary offered about £1,400 per annum. Superannuation scheme in operation. Write, stating age and experience to: Box No. 1436, IProd.E., 10 Chesterfield Street, London, W.1.

**Methods and Planning Engineer** required for factory in Surrey, producing precision aircraft components and assemblies. Live man required, willing to dovetail into existing organisation. Contributory pension scheme. Apply, stating age, experience and salary required to: Box No. 1437, IProd.E., 10 Chesterfield Street, London, W.1.

**Assistant Product Engineer** required at Stonehouse, Gloucestershire, factory of a precision engineering company manufacturing mechanical and electro-mechanical naval ordnance equipment. The duties comprise control of methods, tooling and planning, and experience in these fields together with H.N.C. and appropriate precision engineering background is essential. Applicants should write fully to: The Personnel Manager, Sperry Gyroscope Company Ltd., Great West Road, Brentford, Middlesex.

**Executive Work Study Engineer.** We are looking for a first-class Work Study Engineer of proved ability and experience to set up and develop an efficient work study division in a general engineering works employing 1,500 people and situated in the North of England. This is a top level job and a high salary will be paid to the right man. The post is pensionable and help on removal would be considered. Applications must give full particulars on education, training and experience—age is not a vital factor but must be stated. Apply: Personnel Director, Box No. 1438, IProd.E., 10 Chesterfield Street, London, W.1.

**H.M. Inspector of Factories (Class II).** Ministry of Labour and National Service: H.M. Inspectors of Factories (Class II). The Civil Service Commissioners invite applications from men and women for pensionable posts. Age at least 21 and (unless exceptionally well qualified) under 30 on 1st June in the year of application with extension for regular service in H.M. Forces. London salary (including extra duty allowance where payable) £533 (at age 21), then according to age up to £708 at 26 or over, rising to £969. Somewhat lower outside London. A special increment of £25, within the scale, is granted after passing probation. Higher posts filled by promotion from Class II. Pay and conditions of service are under review. Duties include the enforcement of the provisions of the factories Acts and Regulations affecting the safety, health and welfare of work-people and extend to all manufacturing industries and to certain other places, including docks, works of engineering construction and building operations. Candidates must normally be university graduates, preferably in engineering or natural science (or comparable technical qualifications, e.g., A.M.I.Mech.E.). Graduates in other subjects, including arts, are eligible. Works or other practical experience an advantage. Candidates without degrees (or comparable technical qualifications) who have good general or technical qualifications, and have had considerable works or other practical experience (especially in responsible positions) will also be considered. Application may be made at any time, and so long as there are vacancies suitable candidates will be interviewed. Particulars from: Secretary, Civil Service Commission, 6 Burlington Gardens, London, W.1, quoting No. 280/14.

**Personal Assistant to Technical Manager** required. Age 25-40, H.N.C. or equivalent. Previous experience of machine tool manufacture essential and knowledge of wood-working machinery an advantage. Duties will include preparation of machine alignment charts, technical specifications and instruction books, also technical correspondence and stress calculations. Apply in writing to: Thomas White & Sons, Ltd., Laighpark Works, Paisley.

**Estimator.** A vacancy occurs for an estimator with considerable experience in forging and pressing work, including the calculation of component weights. Experience in hot brass pressing would prove particularly useful and familiarity with machining, welding, polishing and finishing processes would be an additional advantage. This is a staff appointment with superannuation benefits. Applications, which will be treated in confidence, must provide a comprehensive outline of experience and an indication of

salary required. Box. No. 1439, I.Prod.E., 10 Chesterfield Street, London, W.1.

**General Manager.** Progressive organisation in Midlands with wide variety of interests in the engineering industry seeks versatile General Manager for newly created oil burning equipment manufacturing division who must be capable of controlling all aspects, with special emphasis on sales. A substantial salary will be paid to the right man, whose age preferably should be between 35 and 45 years. Please reply to: Box No. 1440, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Superintendent.** Large modern automobile manufacturing plant in India has vacancy for Superintendent of newly installed modern press shop in India. Very attractive terms including passages, furnished accommodation, etc., are offered to person with long experience and of proved technical and administrative ability in similar post. Apply in duplicate with full details of experience and qualifications and stating personal particulars and salary required to: Box No. 1441, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Process Planning Engineers.** Rotol Limited invite applications from Process Planning Engineers for high class precision machine shop work on the manufacture of aero-engine accessories. These vacancies offer good prospects to suitably qualified men. Applicants who have served a recognised apprenticeship or possessing a sound engineering background would also be considered for training for these positions. Applications should be addressed to: The Personnel Manager, Rotol Limited, Cheltenham Road, Gloucester.

**Chief Tool Designer** required by a large progressive internationally known engineering company in South Wales. Applicants must have first class experience in modern mass production tooling design for small and medium sized components. An immediate four-figure salary is offered, plus participation in the Company's bonus scheme. House available. This post offers an unique opportunity with excellent promotion prospects. Letters giving full details of qualifications, experience and present post should be addressed to: The Personnel Manager, Box No. 1442, I.Prod.E., 10 Chesterfield Street, London, W.1.

**The Islamic Republic of Pakistan invites applications for the following posts in Pakistan Ordnance Factories:-**

**Works Manager—1. Ferrous.** To take charge under Superintendent of the Ferrous Group of the various machine shops which include small arms section, shell and miscellaneous machine shops. Experience in precision machining by mass production methods required. **Assistant Works Managers—2. (a) Small arms (rifle).** To take charge, under Works Manager, of the production of small arms. Considerable experience in rifle manufacture by modern production methods essential. **(b) Drawing Office (Production Engineer).** To take charge under the Production Engineer of his drawing office engaged on jig and tool design. For the above posts a recognised professional qualification equivalent to Associate Membership of the appropriate professional Institution is desired.

**Shop Manager—1. Drawing Office.** Senior Draughtsman responsible to Chief Draughtsman for Jig and Tool Design.

**Section Officers (Foremen)—3. Drawing Office Staff—3.** Three required to take posts as Leading Draughtsmen in the drawing office of the Chief Engineer engaged on work in connection with installation and maintenance of plant, machinery and ancillary services. Contract Period—three years.

**Rate of pay (Rupee = 1/6d.).**

**Works Manager.** Rupees 1,300 x 100-1,800 per month plus overseas pay £30 (sterling) per month, plus Technical staff allowance Rs. 250-300 per month according to starting rate. **Assistant Works Manager.** Rupees 950 x 50-1,350 per month plus Overseas pay £25 (sterling) per month, plus technical staff allowance of Rupees 300 per month. **Shop Manager.** Rupees 780 x 50-1,130 per month plus Overseas

pay £25 (sterling) per month plus technical staff allowance of Rupees 300 per month. **Section Officer (Foreman).** Rupees 700 x 30-1,120 per month plus Rupees 75 per month Overseas pay, plus technical staff allowance of Rupees 300 per month. Pay and Overseas pay from date of embarkation. Technical staff allowance from date of arrival in Pakistan. Forms of application may be obtained by applying in writing to: Co-Ordination Officer for P.O.F. (T. & R.), Office of the High Commissioner for Pakistan, 39-40 Lowndes Square, London, S.W.1, quoting Dept. J.P.E., Closing dates for application 20th October, 1956.

**Precision Production Engineer** required to initiate, instal and eventually to manage a new production unit manufacturing fine wire products. Successful applicant will be between 27-32 years of age and will be of Graduate standing. This will be an interesting position, possibly requiring a short stay abroad during training and working conditions are excellent. Location will be in Edinburgh, the standing will be that of a manager; there will be scope for personal advancement and we expect to pay a four figure salary. Box No. 1443, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Work Study Engineers.** Progressive Company requires experienced personnel for all aspects of work study. Work offers many interesting problems due to diverse products of the Company. Salary in accordance with experience. Posts pensionable. Offers considerable scope for further advancement. Five-day week. Applications giving age, experience and present salary to: Personnel Manager, The Telegraph Construction and Maintenance Co. Limited, Telcon Works, Greenwich, S.E.10.

**Area Method Study Engineer** required. (National Coal Board—N.W. Division) No. 2 (Wigan) Area. Duties include the responsibility for the introduction of method study techniques at collieries in the area and lecturing at training courses, etc. Some travelling may be involved. Applicants should have a mining engineering qualification or a good degree in engineering or science or some equivalent qualification. Recent experience at a senior level in method study, work study, or production engineering an advantage. Salary within the range £1,400 to £2,000 per annum. Applications stating age, qualifications, experience and present position to: Assistant Area General Manager, No. 2 (Wigan) area, Kirkless, Nr. Wigan, within 10 days.

**Methods Engineer.** Internationally known and expanding cosmetic manufacturers invite applications for the following permanent post directly responsible to the Works Manager for their South Wales factory employing 200. Applicants should be qualified (H.N.C. or better) mechanical or electrical engineer age about 30-35 with about 5 years Work Study experience, preferably trained and experienced in methods time measurement. If necessary formal training in M.T.M. will be given. There is good scope for mechanical ingenuity and work study in filling processes, packing operations, layout and mechanical handling. Salary £750-£900 according to age and experience. Box No. 1444, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Manufacturing Methods Engineer.** Aircraft-Marine Products (G.B.) Ltd., Industrial Estate, Port Glasgow, Renfrewshire. This is a new subsidiary of an American company, which has been set up to manufacture solderless terminals, and the tools with which they are applied, for the British and sterling area markets. It is a modern and progressive organisation, and offers interesting and remunerative posts. There is at present available a position for a Manufacturing Methods Engineer, who should have sound practical experience with multi-stage press tools, and also training and several years experience in methods work in light engineering. Applications should be addressed to: The Personnel Officer.

**Production Engineer.** A vacancy exists at the modern South Wales Plant of Hoover (Washing Machines) Limited for a first-class Production Engineer. A wide experience



in modern mass production methods and the manufacture of light engineering products is necessary. The successful applicant will assist in the direction and control of a fully experienced technical staff employed in the largest washing machine factory in Europe. The responsibilities cover forward tooling and plant programmes, involving large capital investments. This is an important executive appointment with prospects of ultimate managerial status. Informal interviews will be arranged with applicants at Cardiff, at any time, including weekends, to discuss salary, housing, expenses, etc. Letters of application should be addressed to: The Personnel Manager, Hoover (Washing Machines) Limited, Merthyr Tydfil, South Wales, giving full details of age, qualifications and experience.

**Senior Planning Engineers and Tool Designers.** Senior Planning Engineers and Tool Designers are required by Hoover (Washing Machines) Limited at their South Wales Plant. These appointments are open to engineers with proven ability and experience in large-scale mass production tooling programmes. Informal interviews will be arranged with applicants at Cardiff, at any time, including weekends, to discuss salary, housing, expenses, etc. Letters of application should be addressed to: The Personnel Manager, Hoover (Washing Machines) Limited, Merthyr Tydfil, South Wales, giving full details of age, qualifications and experience.

**Process Manager** is required by Scottish firm of general engineers. The appointment involves considerable responsibility and demands initiative and a thorough knowledge of common and special purpose machines and methods. The first task of the successful candidate will be to reorganise processes, methods and incentives in machine, fitting and fabrication shops employing several hundred personnel. The appointment is one which the management regards as being of vital importance and worthy of a salary of the order of £2,000 per annum, with pension and assistance in regard to housing. Candidates must be well qualified both by training and experience, details of which should be submitted with applications. Box No. 1445, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Senior Designers.** Bristol Repetition Limited have vacancies for a number of Senior Designers for most interesting work on semi-automatic and automatic machine tools, including automation developments. These are permanent-staff appointments and assistance will be given with housing if necessary. Good men will get top rates, will participate in our non-contributory pension scheme and will get every encouragement to use and develop their creative ability to the maximum. Apply: Managing Director, Bristol Repetition Limited, Feeder Road, Bristol, 2.

**Chief Designer Draughtsman** to take complete control of all drawing office activities. Press tool or rubbers or plastics mould design experience an advantage. Good salary and prospects for a man able to take increasing responsibility in a rapidly expanding company. State age, experience and salary required. Pioneer Oilsealing & Moulding Co. Ltd. (a division of J. H. Fenner & Co. Ltd.), Cottontree Works, Colne, Lancs.

**Time and Production Engineer.** Experienced man required to control bonus incentive scheme already installed in a large mass production joinery factory in South Yorkshire. Applicants must be thoroughly experienced in the methods of study control and fully capable of working without supervision. Replies which will be treated in confidence must contain full particulars of background, qualifications, experience, age and salary expected. Address to: Box No. 1446, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Planning Engineers, Jig and Tool Draughtsmen and Tool Estimators** are still required for the staff of the production engineering department of the Rheostatic Company Limited. Applications are invited from men having a sound practical experience of light engineering. Apply: Personnel Manager, The Rheostatic Company Limited, Farnham Road, Slough, Bucks.

**Production Engineer.** Aircraft Equipment Manufacturer located in the country and placing sub-contracts for very high grade machining, seeks the services of a really experienced production engineer to deal with manufacturing snags encountered by sub contractors. The location from which the work is controlled is relatively unimportant, although London would be most convenient, with Birmingham as second choice. Applicants must have had considerable experience of high grade machining to A.I.D. standards, must possess a car and be in receipt of a salary not less than £1,000 per annum at present. Write, enclosing details of education and experience, to: Box No. 1447, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Jig and Tool Designer** for Company manufacturing wide range of hand tools. Full particulars to: Box No. 1448, I.Prod.E., 10 Chesterfield Street, London, W.1.

**Production Engineer.** A qualified engineer is required by a Company engaged in the manufacture of steel-framed buildings. The Head Office and Works of this progressive company is at Wolverhampton, and a rapidly expanding Home and Overseas Market ensures excellent prospects for the future. Applicants should have a University Degree in Engineering, wide experience in factory production including processing, time and motion study, material handling, etc., and be capable of initiating new techniques and improving existing methods of quantity production. Experience of presswork and press tooling would be an advantage. The post demands a man with personality, drive, enthusiasm and a progressive outlook. This is a senior and permanent appointment and will therefore carry a salary commensurate with its senior status. Applications are invited from men aged 35-40 and should include full details of age, qualifications, experience and salary required to: The Production Director, The Coseley Engineering Co. Ltd., Lanesfield, Wolverhampton, Staffs.

**Jig and Tool Draughtsmen.** Blackburn and General Aircraft Ltd., require Jig and Tool Draughtsmen for work in their London office. Applicants should have recent experience in the design of assembly and sub-assembly fixtures for modern high speed aircraft. H.N.C. preferred, but not essential provided applicants have the right experience. This is a good opportunity for competent men, and there is a contributory pension scheme and free life assurance benefits. Written applications in the first instance should be made to: The Personnel Manager, Blackburn and General Aircraft Limited, Brough, E. Yorks. Interviews will be arranged in London.

#### EDUCATIONAL APPOINTMENTS

**Loughborough College of Technology, Loughborough.** Applications are invited for the following positions:-

- (a) Assistant Lecturer in Electrical Engineering subjects.
  - (b) Assistant Lecturer in Production Engineering subjects.
- Applicants should hold a degree in engineering, or Higher National Certificate or Diploma in the appropriate branch, and should have had industrial experience. Salary will be paid according to the Grade B Scale for Assistant Lecturer (Burnham Technical Report 1956), namely £650 x £25 to £1,025 per annum, the commencing salary being determined by qualifications, and type and nature of industrial training and experience. Further particulars and application forms may be obtained from: The Registrar, to whom completed applications should be sent as soon as possible.

**Redditch College of Further Education, Easemore Road, Redditch.**

**Engineering Department:** Applications are invited immediately from suitably qualified men for a new appointment of a Grade A Assistant (salary £475 x £25 - £900 plus additions for training and qualification), to teach Workshop Practice and Technology, and assist in the teaching of engineering science or mathematics. Industrial experience essential and some teaching or instructional experience is desirable. The successful candidate will be required to take up his duties as soon as possible. Application forms may be obtained from: The Director of Education (S/J), County Education Office, Castle Street, Worcester, on receipt of stamped addressed foolscap envelope (N.130).

